

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. R2-2004-027  
NPDES PERMIT NO. CA0038547

AMENDMENT OF WASTE DISCHARGE REQUIREMENTS, ORDER NO. R2-2003-0114, FOR:

**DELTA DIABLO SANITATION DISTRICT  
ANTIOCH, CONTRA COSTA COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The Board, on December 3, 2003, adopted waste discharge requirements, Order No. R2-2003-0114, for Delta Diablo Sanitation District (hereinafter called the Discharger) to discharge treated wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).

**Purpose of Order**

2. For certain pollutants, the Reasonable Potential Analysis (RPA) conducted in the development of Order No. R2-2003-0114 and the water quality-based effluent limitations (WQBELs) included in Order No. R2-2003-0114 are based on water quality criteria (WQC) for the protection of human health based on the consumption of organisms only. The purpose of this Order is to re-evaluate the RPA and revise and establish WQBELs, as necessary, using the appropriate WQC for the protection of human health based on direct consumption of water as well as organisms, because the receiving water is designated as a municipal and domestic supply.

**Scope of Order**

3. This Order contains the following amendments and additions of findings to Order No. R2-2003-0114:
  - a. Revision of final WQBELs for bis(2-ethylhexyl)phthalate and aldrin, based on WQC for the protection of human health based on consumption of water and organisms, consistent with the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) Section 1.4;
  - b. Addition of WQBELs for bromoform, chlorodibromomethane, and dichlorobromomethane, based on WQC for the protection of human health based on consumption of water and organisms, consistent with SIP Section 1.4;

**Facility Description**

4. The Discharger owns and operates a wastewater treatment plant (WWTP) that provides secondary treatment of wastewater from domestic and industrial sources from the cities of Antioch, Pittsburg, and Bay Point. The Discharger's service area has a present population of approximately 180,000. The treatment plant has an average dry weather design capacity of 16.5 million gallons per day

(MGD). The annual average daily flow rate is approximately 14.2 MGD, and the maximum daily flow rate average has been 20.7 MGD. To address peak flows, the plant has a 2.2 million gallon (MG) flow equalization tank, 11 MG emergency retention pond, 1 MG of equalization storage capacity, and approximately 4 MG of storage at the pump stations.

### **Treatment Process Description**

5. The treatment processes consist of screening, grit removal, primary clarification; biological treatment by trickling towers and/or aeration basins, and digesters; chlorination, and dechlorination.

### **Discharge Description**

6. The treated, disinfected and dechlorinated effluent from the WWTP is discharged into New York Slough. The effluent is discharged through a deep water outfall equipped with a diffuser at latitude 38 degrees 01 minutes 40 seconds North and longitude 121 degrees 50 minutes 14 seconds West. The outfall is 400 feet from shore at approximately 46 feet below mean low water.

### **Beneficial Uses**

7. Beneficial uses of the receiving water for this discharge as identified in Order No. R2-2003-0114 are:
  - Agricultural Supply
  - Groundwater Recharge
  - Industrial Service Supply
  - Municipal and Domestic Supply
  - Navigation
  - Industrial Process Supply
  - Water Contact Recreation
  - Non-contact Water Recreation
  - Ocean Commercial and Sport Fishing
  - Wildlife Habitat
  - Preservation of Rare and Endangered Species
  - Fish Migration
  - Fish Spawning
  - Estuarine Habitat

### **Regulatory Bases**

8. The applicable WQC include those for the protection of human health based on the consumption of water and organisms as established by the California Toxics Rule based on the Basin Plan's municipal and domestic supply designation for the receiving waters, which is a water supply source for two drinking water districts.
9. The modification of Order No. R2-2003-0114, NPDES Permit No. CA0038547, is allowed by federal regulation 40CFR122.62(a)(15).
10. The reopening and subsequent amendment of Order No. R2-2003-0114, is also allowed by Section 13263(e) of the Porter Cologne Water Quality Control Act, 1998, which states:

“Upon application by any affected person, or on its own motion, the regional board may review and revise requirements. All requirements shall be reviewed periodically.”

**California Environmental Quality Act Compliance and Public Notice of Action**

11. This amendment of waste discharge requirements is exempt from the environmental impact analysis provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.). (Water Code Section 13389; California Code of Regulations, Title 14, Section 15263.)
12. The Dischargers and interested agencies and persons have been notified of the Board's intent to amend the requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.
13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order No. R2-2003-0114 is amended as described in the following items and effective upon adoption by the Board. To distinguish the original language contained in Order No. R2-2003-0114, from this Order, all the amendments are highlighted by underline for additions and ~~striketrough~~ for deletions.

**1. Amend Finding 38 and Table 2 to read:**

38. The MECs, WQOs/WQC, bases for the WQOs/WQC, background concentrations used and Reasonable Potential conclusions from the RPA are listed in the following table for all constituents analyzed. The RPA results for some of the constituents in the CTR were not determined because of the lack of an objective/criteria or effluent data. (Further details on the RPA can be found in the Fact Sheet.) Based on the RPA methodology in the SIP, the following constituents have been found to have Reasonable Potential to cause or contribute to an excursion above WQOs/WQC: copper, lead, mercury, nickel, cyanide, bromoform, chlorodibromomethane, dichlorobromomethane, bis(2-ethylhexyl)phthalate, aldrin, 4,4'-DDE, dieldrin, and dioxin TEQ.

Table 2. Summary of Reasonable Potential Analysis Results

Constituent <sup>1</sup>	WQO/WQC (µg/L)	Basis <sup>2</sup>	MEC (µg/L)	Maximum Ambient Background Conc. (µg/L)	Reasonable Potential
Antimony	<del>4,300</del> 14	CTR (#1)	0.8	0.337	No
Arsenic	36	BP	12	3.65	No
Cadmium	0.84	BP	0.04	0.06	No
Chromium	11	BP	2.6	Not Available (NA)	No
Copper	3.73	CTR (#6)	12.1	9.9	Yes
Lead	1.95	BP	0.39	2.35	Yes <sup>3</sup>
Mercury*	0.025	BP	0.029	0.0377	Yes
Nickel*	7.1	BP	14	21.8	Yes
Selenium*	5.0	NTR	4	0.3	No
Silver	2.09	BP	0.8	0.0566	No
Thallium	<del>6.3</del> 1.7	CTR (#12)	<0.03	0.14	No
Zinc	58	BP	22	18.2	No
Cyanide	1.0	NTR	6	0.5	Yes
TCDD TEQ*	1.43x10 <sup>-8</sup>	BP	6.47x10 <sup>-8</sup>	4.8x10 <sup>-8</sup>	Yes
Bromoform	4.3	CTR (#20)	17	<0.5	Yes
Chlorodibromomethane	0.41	CTR (#23)	2.9	<0.05	Yes
Dichlorobromomethane	0.56	CTR (#27)	1.1	<0.05	Yes
Bis(2-Ethylhexyl)Phthalate	<del>5.9</del> 1.8	CTR (#68)	46	26.8	Yes
Aldrin	0.000143	CTR (#102)	0.017	NA	Yes
4,4'-DDE*	0.00059	CTR (#109)	<0.01	0.00092	Yes <sup>3</sup>
Dieldrin*	0.00014	CTR (#111)	<0.01	0.00038	Yes <sup>3</sup>
Tributyltin	0.010	BP	0.008	NA	No
Total PAHs	15.0	BP	0.20	0.0333	No
CTR #s 17-126 except 20, 23, 27, 68, 102, 109, and 111	Various or NA	CTR	Non-detect, less than W QO, or no WQO	Less than WQO or Not Available	No or Undetermined <sup>4</sup>

Footnotes for Table 2:

NA = Data Not Available.

[1] Indicates constituents on 303(d) list, dioxin applies to Toxicity Equivalent Factors (TEQ) of 2,3,7,8-TCDD.

[2] BP = Basin Plan; CTR = California Toxics Rule; NTR = National Toxic Rule

[3] Lead, 4,4'-DDE and Dieldrin: RPA = Yes, based on B>WQO or WQC.

[4] Undetermined due to lack of objective/criteria, and/or lack of effluent data (See Fact Sheet Table B for full RPA results).

## 2. Amend Finding 41, Part (1) to read:

### 41. Dioxin TEQ.

- (1) The CTR establishes a numeric human health WQC of ~~0.14~~ 0.013 picograms per liter (pg/L) for 2,3,7,8-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TCDD) based on consumption of water and aquatic organisms.

## 3. Add the following new findings as Findings 50.1, 50.2, and 50.3:

#### **50.1. Bromoform**

- a. RPA Results. This Order establishes effluent limitations for bromoform because the 17 µg/L MEC exceeds the governing WQC of 4.3 µg/L, demonstrating Reasonable Potential by Trigger 1, in Finding 37 of this Order. The governing WQC is based on the CTR's WQC of 4.3 µg/L for the protection of human health based on the consumption of water and aquatic organisms.
- b. WQBELs. The bromoform WQBELs calculated according to SIP procedures are 39 µg/L average monthly and 77 µg/L maximum daily.
- c. Immediate Compliance Feasible. During the period January 2000 through February 2003, the WWTP's self-monitoring effluent data only contained one detected value out of six samples, and therefore the limited detected data preclude any meaningful statistical evaluation to confirm feasibility. However, the MEC in the WWTP's self-monitoring effluent data for bromoform does not exceed the final WQBELs (see Section III.B, Table C of the attached Fact Sheet for detailed results of the analysis). Based on the foregoing, as permitted by the SIP, Section 1.3, final WQBELs for bromoform are established in this Order to protect beneficial uses.

#### **50.2. Chlorodibromomethane**

- a. RPA Results. This Order establishes effluent limitations for chlorodibromomethane because the 2.9 µg/L MEC exceeds the governing WQC of 0.41 µg/L, demonstrating Reasonable Potential by Trigger 1, in Finding 37 of this Order. The governing WQC is based on the CTR's WQC of 0.41 µg/L for the protection of human health based on the consumption of water and aquatic organisms.
- b. WQBELs. The chlorodibromomethane WQBELs calculated according to SIP procedures are 3.7 µg/L average monthly and 7.3 µg/L maximum daily.
- c. Immediate Compliance Feasible. During the period January 2000 through February 2003, the WWTP's self-monitoring effluent data only contained one detected value out of six samples, and therefore the limited detected data preclude any meaningful statistical evaluation to confirm feasibility. However, the MEC in the WWTP's self-monitoring effluent data for chlorodibromomethane does not exceed the final WQBELs (see Section III.B, Table C of the attached Fact Sheet for detailed results of the analysis). Based on the foregoing, as permitted by the SIP, Section 1.3, final WQBELs for chlorodibromomethane are established in this Order to protect beneficial uses.

#### **50.3. Dichlorobromomethane**

- a. RPA Results. This Order establishes effluent limitations for dichlorobromomethane because the 1.1 µg/L MEC exceeds the governing WQC of 0.56 µg/L, demonstrating Reasonable Potential by Trigger 1, in Finding 37 of this Order. The governing WQC is based on the CTR's WQC of 0.56 µg/L for the protection of human health based on the consumption of water and aquatic organisms.
- b. WQBELs. The dichlorobromomethane WQBELs calculated according to SIP procedures are 5.2 µg/L average monthly and 10.3 µg/L maximum daily.

c. Immediate Compliance Feasible. During the period January 2000 through February 2003, the WWTP's self-monitoring effluent data only contained one detected value out of six samples, and therefore the limited detected data preclude any meaningful statistical evaluation to confirm feasibility. However, the MEC in the WWTP's self-monitoring effluent data for dichlorobromomethane does not exceed the final WQBELs (see Section III.B, Table C of the attached Fact Sheet for detailed results of the analysis). Based on the foregoing, as permitted by the SIP, Section 1.3, final WQBELs for dichlorobromomethane are established in this Order to protect beneficial uses.

**4. Amend Finding 51, Part a. and b. to read:**

**51. Bis(2-Ethylhexyl)Phthalate**

- a. *RPA Results.* This Order establishes effluent limitations for bis(2-ethylhexyl)phthalate because the 46 µg/L MEC exceeds the governing WQC of ~~5.9~~ 1.8 µg/L, demonstrating Reasonable Potential by Trigger 1, in Finding 37 of this Order. The governing WQC is based on the CTR's WQC of ~~5.9~~ 1.8 µg/L for the protection of human health based on the consumption of water and aquatic organisms.
- b. *WQBELs.* The bis(2-ethylhexyl)phthalate WQBELs calculated according to SIP procedures are ~~5.9~~ 1.8 µg/L average monthly and ~~11.8~~ 3.6 µg/L maximum daily.

**5. Amend Finding 52, Part a., b., and d. to read:**

**52. Aldrin**

- a. *RPA Results.* This Order establishes limitations for aldrin because the 0.017 µg/L MEC exceeds the governing WQC of ~~0.00014~~ 0.00013 µg/L, demonstrating Reasonable Potential by Trigger 1, in Finding 37 of this Order. The governing WQC is based on the CTR's WQC of ~~0.00014~~ 0.00013 µg/L for the protection of human health based on the consumption of water and aquatic organisms.
- b. *WQBELs.* The aldrin WQBELs calculated according to SIP procedures are ~~0.00014~~ 0.00013 µg/L average monthly and ~~0.00028~~ 0.00026 µg/L maximum daily.
- d. *IPBL.* The limited monitoring data preclude a meaningful statistical determination of a IPBL. Interim effluent limitations are given for aldrin since the Discharger has demonstrated and the Board verified that it is infeasible for the Discharger to achieve immediate compliance with the final effluent limitations (AMEL of ~~0.00014~~ 0.00013 µg/L and MDEL of ~~0.00028~~ 0.00026 µg/L) newly calculated according to the SIP. This is because detection limits are above the final effluent limits. The previous permit contains a final monthly average effluent limitation for aldrin of 0.0013 µg/L, which is well below currently approved analytical detection limits (no interim limit was given in the previous permit because the Board and EPA used the ML to determine that there was compliance with the final limit, which approach a court has since rejected). Since the Discharger cannot immediately comply with the final limit, the interim limitation is set at current performance at 0.005 µg/L, which is the level where the Discharger can demonstrate compliance. This is not inconsistent with anti-backsliding requirements because: 1) the proposed final WQBEL set forth in the findings is more stringent than the final WQBEL specified in the previous permit, 2) as set forth in the State Board Order WQ 2001-06, antibacksliding does not apply to the interim limitations in a

compliance schedule and the proposed interim *performance-based* limit is not “comparable” to the prior *water quality*-based limit of the previous permit, and 3) even if antibacksliding and antidegradation policies apply to interim limitations under CWA 402(o)(2)(c), a less stringent limitation is necessary because of factors over which the Discharger has no control - specifically, the limits of analytical technology.

**6. Amend Finding 67 to read:**

67. *Monitoring Requirements (Self-Monitoring Program)*. The Self-Monitoring Program (SMP) includes monitoring at the outfall for conventional, non-conventional, and toxic pollutants, and acute toxicity. The monitoring frequency for TSS has been increased to five times per week since the Board believes that daily performance monitoring is appropriate for major POTWs. Since TSS provides a better measure of daily performance, the settleable solids monitoring frequency is reduced to quarterly. This Order requires monthly monitoring for lead to demonstrate compliance with final effluent limitations. This Order also requires monthly monitoring for copper, nickel, mercury, and cyanide to demonstrate compliance with interim effluent limitations. Additionally, this Order requires quarterly monitoring for aldrin to determine compliance with the interim effluent limitation, and to monitor the efficiency of the pollution prevention and source control measures implemented to reduce aldrin concentration levels in the effluent. Furthermore, this Order requires twice yearly monitoring for bis(2-ethylhexyl) phthalate, bromoform, chlorodibromomethane, dichlorobromomethane, dieldrin, 4,4'-DDE, and dioxins and furans to determine compliance with effluent limitations since these pollutants have sparse data with either limited or no detected values in the effluent during the period 2000 through 2002. In lieu of near field discharge specific ambient monitoring, it is generally acceptable that the Discharger participate in collaborative receiving water monitoring with other dischargers under the provisions of the Board's August 6, 2001 Letter and the RMP.

**7. Amend B. Effluent Limitations, Toxic Substances, Table 4. to read:**

Table 4. Toxic Substances

Constituent		Units	Maximum Daily	Average Monthly	Interim Daily Maximum	Interim Monthly Average	Notes
CTR No.	Name						
6	Copper	µg/l			16		(1)(2)
7	Lead	µg/l	3.2	1.6			(1)
8	Mercury	µg/l				0.084	(1)(3)
9	Nickel	µg/l			20		(1)(4)
14	Cyanide	µg/l			25		(1)(5)
20	<u>Bromoform</u>	µg/l	<u>77</u>	<u>39</u>			(1)
23	<u>Chlorodibromomethane</u>	µg/l	<u>7.3</u>	<u>3.7</u>			(1)
27	<u>Dichlorobromomethane</u>	µg/l	<u>10.3</u>	<u>5.2</u>			(1)
68	Bis(2-Ethylhexyl) Phthalate	µg/l			46		(1)(6)
102	Aldrin	µg/l			0.005		(1)(6)
109	4,4'-DDE	µg/l			0.05		(1)(7)
111	Dieldrin	µg/l			0.01		(1)(7)
	TCDD TEQ	pg/l				0.13	(1)(8)

**8. Amend Self-Monitoring Program (SMP), Part B, Table 1 and Table 2 to read:**

**V. SCHEDULE of SAMPLING, ANALYSES and OBSERVATIONS**

TABLE 1 – SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS [1]

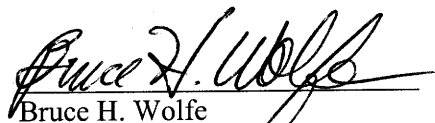
SAMPLING STATION		A-001	E-001-D		E-001-S	All C	All P	All OV
TYPE OF SAMPLE	Notes	C-24 [1] [2]	G [1]	C-24 [1] [2]	C-24 [1] [2]	G [1]	O [1]	O [1]
Flow Rate (mgd)	[3]	Cont/D		Cont/D				
BOD <sub>5</sub> 20°C, or CBOD (mg/L & kg/d)	[15]	2/W		2/W				
Chlorine Residual & Dosage (mg/L & kg/d)	[12]				H or continuous			
Oil and Grease (mg/L & kg/d)	[4] [5]			M				
Settleable Matter (mg/L-hr & ft <sup>3</sup> /d)	[5]		Q					
Total Suspended Solids (mg/L & kg/d)	[15]	5/W		5/W				
Total Coliform (MPN/100 ml)			3/W					
Acute Toxicity (% survival)	[6]				M			
Chronic Toxicity	[7]			Q				
pH (s.u.)	[14]		D			Q		
Temperature (°C)			Q			Q		
Dissolved Oxygen (mg/L & % saturation)						Q		
Sulfides, Total & Dissolved (mg/L)	[8]					Q		
Apparent Color (Visual Obs.)						Q		
Un-ionized Ammonia						Q		
Copper (µg/L)				M				
Lead (µg/L)				M				
Mercury (µg/L)	[9]			M				
Nickel (µg/L)				M				
Cyanide (µg/L)	[10]			M				
Bromoform (µg/L)				2/Y				
Chlorodibromomethane (µg/L)				2/Y				
Dichlorobromomethane (µg/L)				2/Y				
Bis(2-Ethylhexyl)Phthalate (µg/L)				2/Y				
Aldrin (µg/L)				Q				
4,4'-DDE (µg/L)				2/Y				
Dieldrin (µg/L)				2/Y				
2,3,7,8-TCDD and congeners	[11]			2/Y				
Standard Observations						Q	2W	E
Pretreatment Requirements µg/L or ppb	[13]							



Table 2. Minimum Levels

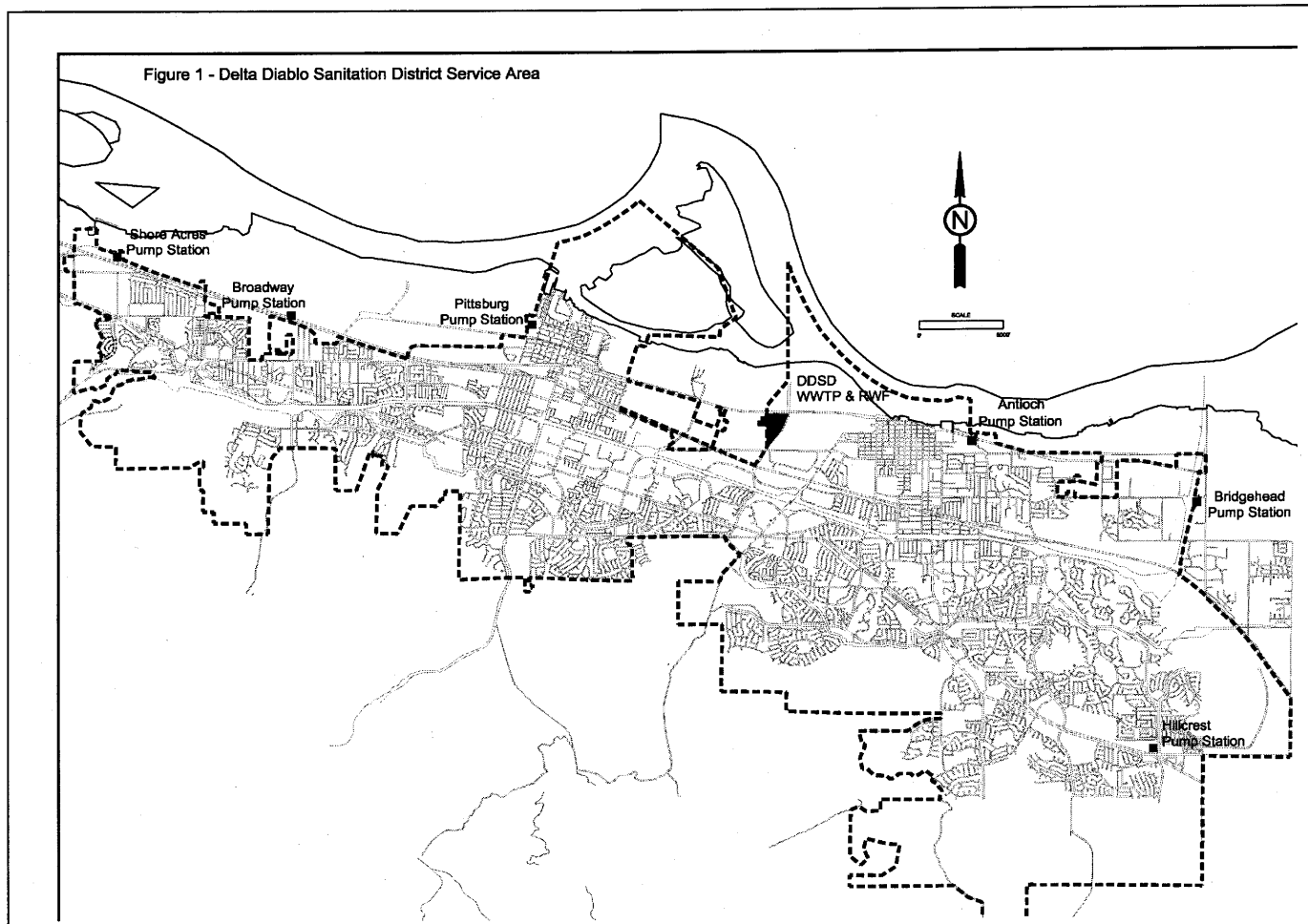
CTR #	Constituent [a]	Types of Analytical Methods [b]						
		GC	GCMS	Color	GFAA	ICPMS	SPGFAA	CVAF
6.	Copper					0.5	2	
7.	Lead					0.5		
8.	Mercury[c]							0.002
9.	Nickel				5	1	5	
14.	Cyanide			5				
20.	Bromoform	0.5						
23.	Chlorodibromomethane	0.5						
27.	Dichlorobromomethane	0.5						
68.	Bis(2-Ethylhexyl)Phthalate		5					
102.	Aldrin	0.005						
109.	4,4'-DDE	0.05						
111.	Dieldrin	0.01						
16.	2,3,7,8-TCDD[d]							

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Board, San Francisco Bay Region on May 19, 2004.

  
Bruce H. Wolfe  
Executive Officer

Attachment A: Facility Location Map

**Attachment A – Facility Location Map**



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

**SAN FRANCISCO BAY REGION**

**1515 CLAY STREET, SUITE 1400**

**OAKLAND, CA 94612**

**(510) 622 - 2300 Fax: (510) 622 - 2460**

**FACT SHEET for**

**AMENDMENT TO WASTE DISCHARGE REQUIREMENTS, ORDER NO. R2-2003-0114,**

**FOR**

**DELTA DIABLO SANITATION DISTRICT**

**ANTIOCH, CONTRA COSTA COUNTY**

**NPDES Permit No. CA0038547**

**ORDER NO. R2-2004-027**

**PUBLIC NOTICE:**

**Written Comments**

- Interested persons are invited to submit written comments concerning this draft permit amendment. The comments should be sent to 1515 Clay Street, Suite 1400, Oakland, CA 94612. Attention, Gayleen Perreira.
- Comments must be received by the California Regional Water Quality Control Board, San Francisco Region (the Regional Board) no later than 5:00 p.m. on April 12, 2004.

**Public Hearing**

- The Amendment will be considered for adoption by the Regional Board at a public hearing during the Regional Board's regular monthly meeting at: Elihu Harris State Office Building, 1515 Clay Street, Oakland, CA; 1st floor Auditorium.
- This meeting will be held on May 19, 2004, starting at 9:00 am.

**Additional Information**

- For additional information about this matter, interested persons should contact Regional Board staff member Ms. Gayleen Perreira, Phone: (510) 622-2407; email: gp@rb2.swrcb.ca.gov

**I. INTRODUCTION**

This Fact Sheet contains information regarding an amendment to the Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) permit for Delta Diablo Sanitation District (DDSD, the Discharger) for discharges from its wastewater treatment plant. This Fact Sheet describes the factual, legal, and methodological basis for the proposed permit amendment and provides supporting documentation to explain the rationale and assumptions used in deriving the limits contained in the permit amendment.

The water quality based effluent limits in Board Order No. R2-2003-0114 did not consider the potential human health impact from consuming water. As the beneficial uses of the receiving water

include municipal and domestic supply, the purpose of this Order is to amend the Board's Order No. R2-2003-0114 (hereinafter referred to as Amendment) by applying the correct water quality criteria (WQC) for the protection of human health based on consumption of water and organisms, consistent with SIP Section 1.4. This amendment revises 1) WQBELs for bis(2-ethylhexyl)phthalate and aldrin, and 2) adds WQBELs for bromoform, chlorodibromomethane, and dichlorobromomethane.

#### **A. Discharge Description**

The Discharger owns and operates a wastewater treatment plant (WWTP) that provides secondary treatment of wastewater from domestic and industrial sources from the cities of Antioch, Pittsburg, and Bay Point. The Discharger's service area has a present population of approximately 180,000. The treatment plant has an average dry weather design capacity of 16.5 million gallons per day (MGD). The annual average daily flow rate is approximately 14.2 MGD, and the maximum daily flow rate average has been 20.7 MGD. To address peak flows, the plant has a 2.2 million gallon (MG) flow equalization tank, 11 MG emergency retention pond, 1 MG of equalization storage capacity, and approximately 4 MG of storage at the pump stations.

#### **B. Discharge Point**

The treated, disinfected and dechlorinated effluent from the WWTP is discharged into New York Slough. The effluent is discharged through a deep water outfall equipped with a diffuser at latitude 38 degrees 01 minutes 40 seconds North and longitude 121 degrees 50 minutes 14 seconds West. The outfall is 400 feet from shore at approximately 46 feet below mean low level.

#### **C. Receiving Water Beneficial Uses**

Beneficial uses for the Sacramento-San Joaquin Delta (hereinafter referred to as the Delta), as identified in the Board's June 21, 1995, *Water Quality Control Plan San Francisco Bay Basin (Region 2)* (the Basin Plan) (Table 2-7) and based on known uses of the receiving waters in the vicinity of the discharges, are:

- Agricultural Supply
- Groundwater Recharge
- Industrial Service Supply
- Municipal and Domestic Supply
- Navigation
- Industrial Process Supply
- Water Contact Recreation
- Non-contact Water Recreation
- Ocean Commercial and Sport Fishing
- Wildlife Habitat
- Preservation of Rare and Endangered Species
- Fish Migration
- Fish Spawning

- Estuarine Habitat

Contiguous water bodies of the Delta in the vicinity of the discharge include freshwater, brackish, and saltwater sloughs such as New York Slough. Beneficial uses specific to these areas are not identified in the Basin Plan. The Basin Plan's tributary rule applies the beneficial uses of identified water bodies to its tributaries.

## II. COMPARISON TO PREVIOUS REASONABLE POTENTIAL ANALYSIS

Code of Federal Regulations Title 40, Part 122.44(d)(1)(i) (40 CFR 122.44(d)(1)(i)) specifies that permits must include WQBELs for all pollutants "which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard" (have Reasonable Potential). Thus, assessing whether a pollutant has Reasonable Potential is the fundamental step in determining whether or not a WQBEL is required.

The water quality objectives (WQOs) and WQC applicable to the receiving waters for this discharge are from the Basin Plan, the U.S. EPA's May 18, 2000 *Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California* (the California Toxics Rule, or the CTR), and the U.S. EPA's *National Toxics Rule* (the NTR). The applicable WQC include those for the protection of human health based on the consumption of both water and organisms as established by the Basin Plan's municipal and domestic supply designation for the receiving waters, which is a water supply source for two drinking water districts.

The RPA previously conducted for Order No. R2-2003-0114 assumed CTR WQC for the protection of human health based on the consumption of organisms only. This Amendment revises the RPA by applying the appropriate CTR WQC for the protection of human health based on the consumption of water as well as organisms.

The revised RPA results are shown below in Table A and Attachment 1 of this Fact Sheet; however, Table A includes only those parameters whose governing WQC have been revised. The pollutants that exhibit Reasonable Potential are copper, lead, mercury, nickel, cyanide, bromoform, chlorodibromomethane, dichlorobromomethane, bis(2-ethylhexyl)phthalate, aldrin, 4,4'-DDE, dieldrin, and dioxin and furans.

**Table A. Summary of Reasonable Potential Results**

# in CTR	PRIORITY POLLUTANTS	MEC or Minimum DL <sup>1</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background (µg/L)	RPA Results <sup>2</sup>
1	Antimony	0.8	14	0.337	N
12	Thallium	0.03	1.7	0.14	N
16	2,3,7,8-TCDD (Dioxin)	6.46E-08	1.3E-08	4.8E-08	Y
17	Acrolein	3	320	0.5	N
18	Acrylonitrile	1	0.059	0.05	N
19	Benzene	0.3	1	0.05	N
20	Bromoform	17	4.3	0.5	Y
21	Carbon Tetrachloride	0.3	0.3	0.06	N

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# in CTR	PRIORITY POLLUTANTS	MEC or Minimum DL <sup>1</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background (µg/L)	RPA Results <sup>2</sup>
22	Chlorobenzene	0.3	680	0.5	N
23	Chlorodibromomethane	2.9	0.41	0.05	Y
27	Dichlorobromomethane	1.1	0.56	0.05	Y
29	1,2-Dichloroethane	0.3	0.38	0.04	N
30	1,1-Dichloroethylene	0.3	0.057	0.5	N
31	1,2-Dichloropropane	0.3	0.52	0.05	N
32	1,3-Dichloropropylene	0.6	10	NA	N
33	Ethylbenzene	0.3	3100	0.5	N
34	Methyl Bromide	1.7	48	0.5	N
36	Methylene Chloride	2	4.7	0.5	N
37	1,1,2,2-Tetrachloroethane	0.3	0.17	0.05	N
38	Tetrachloroethylene	0.3	0.8	0.05	N
39	Toluene	0.7	6800	0.3	N
40	1,2-Trans-Dichloroethylene	0.3	700	0.5	N
42	1,1,2-Trichloroethane	0.3	0.6	0.05	N
43	Trichloroethylene	0.3	2.7	0.5	N
44	Vinyl Chloride	0.3	2	0.5	N
45	2-Chlorophenol	5	120	1.2	N
46	2,4-Dichlorophenol	5	93	1.3	N
47	2,4-Dimethylphenol	2	540	1.3	N
48	2-Methyl-4,6-Dinitrophenol	5	13.4	1.2	N
49	2,4-Dinitrophenol	5	70	0.7	N
53	Pentachlorophenol	1	0.28	1	N
54	Phenol	34	21000	1.3	N
55	2,4,6-Trichlorophenol	5	2.1	1.3	N
56	Acenaphthene	5	1200	0.005	N
58	Anthracene	0.3	9600	0.0058	N
59	Benzidine	5	0.00012	0.0015	N
60	Benzo(a)Anthracene	0.3	0.0044	0.0011	N
61	Benzo(a)Pyrene	0.3	0.0044	0.00032	N
62	Benzo(b)Fluoranthene	0.3	0.0044	0.0019	N
64	Benzo(k)Fluoranthene	0.3	0.0044	0.00093	N
66	Bis(2-Chloroethyl)Ether	1	0.031	0.3	N
67	Bis(2-Chloroisopropyl)Ether	2	1400	NA	N
68	Bis(2-Ethylhexyl)Phthalate	46	1.8	26.8	Y
70	Butylbenzyl Phthalate	5	3000	0.52	N
71	2-Chloronaphthalene	5	1700	0.3	N
73	Chrysene	0.3	0.0044	0.001	N
74	Dibenzo(a,h)Anthracene	0.1	0.0044	0.00067	N
75	1,2 Dichlorobenzene	0.3	2700	0.8	N
76	1,3 Dichlorobenzene	0.3	400	0.8	N
77	1,4 Dichlorobenzene	0.7	400	0.8	N
78	3,3-Dichlorobenzidine	5	0.04	0.004	N
79	Diethyl Phthalate	2	23000	0.24	N

# in CTR	PRIORITY POLLUTANTS	MEC or Minimum DL <sup>1</sup> (µg/L)	Governing WQO/WQC (µg/L)	Maximum Background (µg/L)	RPA Results <sup>2</sup>
80	Dimethyl Phthalate	2	313000	0.24	N
81	Di-n-Butyl Phthalate	5	2700	<b>1.72</b>	N
82	2,4-Dinitrotoluene	5	0.11	0.27	N
85	1,2-Diphenylhydrazine	1	0.04	<b>0.0087</b>	N
86	Fluoranthene	5	300	<b>0.003</b>	N
87	Fluorene	0.05	1300	<b>0.0021</b>	N
88	Hexachlorobenzene	1	0.00075	<b>0.000053</b>	N
89	Hexachlorobutadiene	1	0.44	0.3	N
90	Hexachlorocyclopentadiene	5	240	0.31	N
91	Hexachloroethane	1	1.9	0.2	N
92	Indeno(1,2,3-cd) Pyrene	0.05	0.0044	<b>0.0013</b>	N
93	Isophorone	1	8.4	0.3	N
95	Nitrobenzene	1	17	0.25	N
96	N-Nitrosodimethylamine	5	0.00069	0.3	N
97	N-Nitrosodi-n-Propylamine	5	0.005	0.001	N
98	N-Nitrosodiphenylamine	1	5	0.001	N
100	Pyrene	0.05	960	<b>0.0025</b>	N
102	Aldrin	<b>0.017</b>	0.00013	NA	Y
103	alpha-BHC	0.01	0.0039	<b>0.000347</b>	N
104	beta-BHC	0.005	0.014	<b>0.000118</b>	N
105	gamma-BHC	0.01	0.019	<b>0.0010032</b>	N
107	Chlordane	0.01	0.00057	<b>0.000302</b>	N
110	4,4'-DDD	0.01	0.00083	<b>0.000347</b>	N
114	Endosulfan Sulfate	0.01	110	<b>0.0002</b>	N
116	Endrin Aldehyde	0.01	0.76	NA	CD
118	Heptachlor Epoxide	0.01	0.00010	<b>0.000097</b>	N

- 1) Maximum Effluent Concentration (MEC) in bold is the actual detected MEC, otherwise the MEC shown is the minimum detection level.  
 NA = Not Available (there is not monitoring data for this constituent).
- 2) RP = Yes, if either MEC or Background > WQO/WQC.  
 RP = No, if both MEC or background < WQO/WQC or all effluent concentrations non-detect and background < WQO/WQC or no background available.  
 RP = CD (Cannot determine due to lack of data)

### III. WATER QUALITY-BASED EFFLUENT LIMITATIONS

#### A. Revised WQBELs for Bis(2-Ethylhexyl)Phthalate and Aldrin

Order No. R2-2003-0114 established WQBELs for bis(2-ethylhexyl)phthalate and aldrin. These limits are based on CTR WQC for the protection of human health based on the consumption of organisms only. This Amendment revises the WQBELs for bis(2-ethylhexyl)phthalate and aldrin, based on CTR WQC for the protection of human health based on the consumption of water and organisms.

Interim effluent limitations were derived for bis(2-ethylhexyl)phthalate and aldrin in Order No. R2-2003-0114 because the Discharger showed infeasibility of complying with the respective

WQBELs, and demonstrated that compliance schedules are justified based on the Discharger's source control and pollution minimization efforts. These interim limits are unchanged and shall remain in effect until January 31, 2009. However, during the next permit reissuance, the Board may re-evaluate these interim effluent limitations and compliance deadlines.

#### **B. Added WQBELs for Bromoform, Chlorodibromomethane, and Dichlorobromomethane**

This Amendment establishes final WQBELs for bromoform, chlorodibromomethane, and dichlorobromomethane because, as shown in Table A, their respective MECs exceed the governing WQC. The governing WQC are based on the CTR's WQC for the protection of human health based on the consumption of water and organisms.

Effluent data for the period from January 2000 through February 2003 consist of one detected value out of six samples each of bromoform, chlorodibromomethane, and dichlorobromomethane. The Board finds that this small number of detected data precludes any meaningful statistical evaluation of current treatment performance, and therefore feasibility is determined using each pollutant's MEC. Table B below shows that it is feasible for the Discharger to comply with final effluent limitations for bromoform, chlorodibromomethane, and dichlorobromomethane.

**Table B. Summary of Feasibility Evaluation**

<b>Constituent</b>	<b>Unit</b>	<b>AMEL</b>	<b>MDEL</b>	<b>MEC</b>	<b>Is MEC &gt; AMEL</b>	<b>Is MEC &gt; MDEL</b>	<b>Feasible to Comply</b>
Bromoform	µg/l	39	77	17	No	No	Yes
Chlorodibromomethane	µg/l	3.7	7.3	2.9	No	No	Yes
Dichlorobromomethane	µg/l	5.2	10.3	1.1	No	No	Yes

#### **IV. AMENDMENTS TO SELF-MONITORING PROGRAM**

The Amendment revises Table 1 of the Self-Monitoring Program to include twice yearly monitoring for bromoform, chlorodibromomethane, and dichlorobromomethane to determine compliance with effluent limitations.

The Amendment also revises Table 2 of the Self-Monitoring Program to include Minimum Levels for bromoform, chlorodibromomethane, and dichlorobromomethane.

#### **VI. WASTE DISCHARGE REQUIREMENT APPEALS**

Any person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding these Waste Discharge Requirements. A petition must be made within 30 days of the Board public hearing.

#### **VII. ATTACHMENTS**

**Attachment A:** Water Quality Objectives and Water Quality Criteria  
**Attachment B:** Calculation of Final WQBELs



Fact Sheet  
DDSD Permit Amendment  
NPDES Permit NO. CA0038547  
Final Order

**Attachment A.**  
**Water Quality Objectives**  
**and**  
**Water Quality Criteria**

**Attachment 1.**  
**Water Quality Objectives**  
**and**  
**Water Quality Criteria**

Is it a RB2 facility (Y/N)? **Y**  
Hardness (mg/L CaCO<sub>3</sub>) **68**  
pH (s.u.) **7.8**

Note: DO NOT enter any value for the column that is NOT applicable

Note: Numbers in blue have formula in the cells - calculates values automatically

# in CTR		PRIORITY POLLUTANTS	Lowest (most stringent) Criteria *	Basin Plan Objectives (ug/L)- Regional Board 2								CTR Water Quality Criteria (ug/L)						Factors for Metals				Conversion Factor (CF)			
				Freshwater				Saltwater				Freshwater		Saltwater		Human Health for consumption of:		Freshwater Criteria							
				Table 3-4)				(from Table 3-3)																	
				4-day	1-hr	24-hr	Max	4-day	1-hr	24-hr	Max	CMC (acute)	CCC (chronic)	CMC (acute)	CCC (chronic)	Water & organisms	Organisms only	ma	ba	mc	bc	freshwater acute criteria	freshwater chronic criteria	saltwater acute criteria	saltwater chronic criteria
ug/L				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L										
1	Antimony		14												14										
2	Arsenic		36	190	360			36	69			340	150	69	36						1	1	1	1	
3	Beryllium	No Criteria																							
4	Cadmium	0.84	0.84	2.54				9.3	43			2.92	1.8	42.3	9.4		1.128	-3.6867	0.7852	-2.715	0.960	0.925	0.994	0.994	
5a	Chromium (III)	150.92										1258.2	150.9				0.8190	3.6880	0.8190	1.5610	0.316	0.86			
5b	Chromium (VI) or total Cr	11.00	11	16				50	1,100			16	11	1,100	50						0.982	0.962	0.993	0.993	
6	Copper	3.73	8.50	12.32								9.7	8.7	8.8	3.7	1300.0	0.9422	-1.7000	0.8545	-1.7020	0.96	0.96	0.83	0.83	
7	Lead	1.95	1.95	50.0				5.6	140			50.0	1.95	224	6.5		1.2730	-1.4600	1.2730	-4.7050	0.847	0.847	0.951	0.951	
8	Mercury	0.025	0.025	2.4				0.025	2.1						0.050										
9	Nickel	7.10	113.77	1023.42	58	1,100			7.1	140		339.0	37.6	75	8.3	610.0	0.8460	2.2550	0.8460	0.0584	0.998	0.997	0.99	0.99	
10	Selenium	5.00										20	5	20	5								0.998	0.998	
11	Silver	2.09				2.09				2.3		2.1		2.2			1.7200	-6.5200			0.85		0.85		
12	Thallium	1.70														1.7									
13	Zinc	58.00	78.45	84.40	58	170			58	170		86.4	86.4	95	86		0.8473	0.8840	0.8473	0.8840	0.978	0.986	0.946	0.946	
14	Cyanide	1	5.2	22				5				22	5	1	1	700									
15	Asbestos	No Criteria														7,000,000 fibers/L									
16	2,3,7,8-TCDD (Dioxin)	0.00000013														1.3E-08									
17	Acrolein	320														320									
18	Acrylonitrile	0.059														0.059									
19	Benzene	1														1.2									
20	Bromoform	4.3														4.3									
21	Carbon Tetrachloride	0.3														0.25									
22	Chlorobenzene	680														680									
23	Chlorodibromomethane	0.41														0.41									
24	Chloroethane	No Criteria																							
25	2-Chloroethylvinyl Ether	No Criteria																							
26	Chloroform	No Criteria																							
27	Dichlorobromomethane	0.56														0.56									
28	1,1-Dichloroethane	No Criteria																							
29	1,2-Dichloroethane	0														0.38									
30	1,1-Dichloroethylene	0.06														0.057									
31	1,2-Dichloropropane	1														0.52									
32	1,3-Dichloropropylene	10														10									
33	Ethylbenzene	3,100														3100									
34	Methyl Bromide	48														48									
35	Methyl Chloride	No Criteria																							
36	Methylene Chloride	8														4.7									
37	1,1,2,2-Tetrachloroethane	0														0.17									
38	Tetrachloroethylene	0.80														0.8									
39	Toluene	8,800														8800									
40	1,2-Trans-Dichloroethylene	700														700									
41	1,1,1-Trichloroethane	No Criteria																							
42	1,1,2-Trichloroethane	1														0.6									
43	Trichloroethylene	3														2.7									
44	Vinyl Chloride	2														2									
45	Chlorophenol	120														120									
46	2,4-Dichlorophenol	93														93									
47	2,4-Dimethylphenol	540														540									
48	2-Methyl-4,6-Dinitrophenol	13														13.4									
49	2,4-Dinitrophenol	70														70									
50	2-Nitrophenol	No Criteria																							
51	4-Nitrophenol	No Criteria																							
52	3-Methyl-4-Chlorophenol	No Criteria																							
53	Pentachlorophenol	0.28										19	15	13	7.9	0.3									
54	Phenol	21000														21000									
55	2,4,6-Trichlorophenol	2.10														2.1									
56	Acenaphthene	1,200														1200									
57	Acenaphthylene	No Criteria																							
58	Anthracene	9,600														9600									
59	Benzidine	0.00012														0.00012									
60	Benzo(a)Anthracene	0.004														0.0044									
61	Benzo(a)Pyrene	0.004														0.0044									
62	Benzo(b)Fluoranthene	0.004														0.0044									
63	Benzo(ghi)Perylene	No Criteria																							
64	Benzo(k)Fluoranthene	0.004														0.0044									
65	Bis(2-Chloroethoxy)Methane	No Criteria																							
66	Bis(2-Chloroethyl)Ether	0.03														0.031									
67	Bis(2-Chloroisopropyl)Ether	1,400														1400									
68	Bis(2-Ethylhexyl)Phthalate	1.80														1.8									
69	4-Bromophenyl Phenyl Ether	No Criteria																							
70	Butylbenzyl Phthalate	3,000														3000									
71	2-Chloronaphthalene	1,700														1700									
72	4-Chlorophenyl Phenyl Ether	No Criteria																							
73	Chrysene	0.004														0.0044									
74	Dibenzo(a,h)Anthracene	0.004														0.0044									
75	1,2-Dichlorobenzene	2,700								</															

**Attachment 1.  
Water Quality Objectives**

# in CTR		PRIORITY POLLUTANTS	Lowest (most stringent) Criteria *	Basin Plan Objectives (ug/L)- Regional Board 2								Water Quality Criteria (ug/L)						Factors for Metals				Conversion Factor (CF)			
				Freshwater Table 3-4)				Saltwater (from Table 3-3)				Freshwater		Saltwater		Human Health for consumption of:		Freshwater Criteria				Conversion Factor (CF)			
				4-day	1-hr	24-hr	Max	4-day	1-hr	24-hr	Max	CMC (acute)	CCC (chronic)	CMC (acute)	CCC (chronic)	Water & organisms	Organisms only	ma	ba	mc	bc	freshwater acute criteria	freshwater chronic criteria	saltwater acute criteria	saltwater chronic criteria
ug/L				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L										
	84	Di-n-Octyl Phthalate	No Criteria																						
	85	1,2-Diphenylhydrazine	0.04												0.04										
	86	Fluoranthene	300													300									
	87	Fluorene	1,300													1300									
	88	Hexachlorobenzene	0.00075													0.00075									
	89	Hexachlorobutadiene	0												0.44										
	90	Hexachlorocyclopentadiene	240													240									
	91	Hexachloroethane	1.90													1.9									
	92	Indeno(1,2,3-cd) Pyrene	0.004													0.0044									
	93	Isophorone	5													8.4									
	94	naphthalene	No Criteria																						
	95	Nitrobenzene	17													17									
	96	N-Nitrosodimethylamine	0.00													0.00069									
	97	N-Nitrosodi-n-Propylamine	0.01													0.005									
	98	N-Nitrosodiphenylamine	5													5									
	99	Phenanthrene	No Criteria																						
	100	Pyrene	960													960									
	101	1,2,4-Trichlorobenzene	No Criteria																						
	102	Aldrin	0.00013									3		1.3		0.00013									
	103	alpha-BHC	0.004													0.0039									
	104	beta-BHC	0.014													0.014									
	105	gamma-BHC	0.019									0.95		0.16		0.019									
	106	delta-BHC	No Criteria																						
	107	Chlordane	0.00057									2.4	0.0043	0.09	0.004	0.001									
	108	4,4-DDT	0.00059									1.1	0.001	0.13	0.001	0.001									
	109	4,4-DDE	0.00058													0.00059									
	110	4,4-DDD	0.00063													0.00083									
	111	Dieldrin	0.00014									0.24	0.056	0.71	0.0019	0.00014									
	112	alpha-Endosulfan	0.0097									0.22	0.056	0.034	0.0087	110									
	113	beta-Endosulfan	0.0067									0.22	0.056	0.034	0.0087	110									
	114	Endosulfan Sulfate	110													110									
	115	Endrin	0.0023									0.066	0.036	0.037	0.0023	0.76									
	116	Endrin Aldehyde	0.76													0.76									
	117	Heptachlor	0.00021									0.52	0.0038	0.053	0.0036	0.00021									
	118	Heptachlor Epoxide	0.00010									0.52	0.0038	0.053	0.0036	0.0001									
	119-125	PCBs sum (2)	0.00017										0.014			0.03	0.00								
	126	Toxaphene	0.00020									0.73	0.0002	0.21	0.0002	0.00073									
		Tributyltin	0.010					0.010																	

Notes:

(1) Receiving body: hardness (adjusted geometric mean) = 68 mg/L as CaCO3

Fact Sheet  
DDSD Permit Amendment  
NPDES Permit NO. CA0038547  
Final Order

**Attachment B.**  
**Calculation of Final WQBELs**

Draft Effluent Limitation Calculations  
Delta Diablo Sanitation District

Note: Numbers in blue have formula in the cells - calculates values automatically

PRIORITY POLLUTANTS	Copper	Lead	Mercury	Nickel	CN	Bis2- EthynylIP thialate	Aldrin	4,4'-DDE	Dieldrin	Dioxin	Bromoform	Chlorodibromomethane	Dichlorobromomethane
Basic and Criteria type	CTR - SW	BP FW (4-d, 1-hr avg)	BP SW (4-d, 1-hr avg)	BP SW (24-hr, Inst. Max)	CTR - SW	CTR - HH	CTR - HH	CTR - HH	CTR - HH	CTR - HH	CTR - HH	CTR - HH	CTR - HH
Lowest WOO	3.73	1.95	0.025	7.1	1	1.80	0.00013	0.00059	0.00014	0.000000013	4.3	0.41	0.56
Translators													
Dilution Factor (D) (if applicable)	9	9	9	9	9	9	9	9	9	9	9	9	9
no. of samples per month	4	4	4	4	4	4	4	4	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HH criteria analysis required? (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N
Applicable Acute WOO	5.8	50	2.1	140	1								
Applicable Chronic WOO	3.73	1.95	0.025	7.1	1								
HH criteria			0.050	610	700	1.80	0.00013	0.00059	0.00014	0.000000013	4.3	0.41	0.56
Background (max conc for Aquatic Life calc)	9.9	2.35	0.0377	21.8	0.5								
Background (avg conc for HH calc)						10.0		0.000365	0.000142	0.027750	0.5	0.05	0.05
Is the pollutant Bioaccumulative(Y/N)? (e.g., Hg)	N	N	Y	N	N	N	N	Y	Y	Y	N	N	N
ECA acute	5.8	472.85	2.1	1203.8	5.5								
ECA chronic	3.73	1.95	0.025	7.1	5.5								
ECA HH			0.05	610	700	1.8	0.00013	0.00059	0.00014	0.000000013	36.5	3.65	5.15
No. of data points <10 or atleast 80% of data reported non detect? (Y/N)	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
avg of data points	7.539		0.0140	6.63									
SD	1.74		0.0115	3.22									
CV calculated	0.23	N/A	0.82	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CV (Selected) - Final	0.23	0.60	0.82	0.49	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
ECA acute mult99	0.60	0.32	0.24	0.38	0.32								
ECA chronic mult99	0.77	0.53	0.43	0.59	0.53								
LTA acute	3.51	153.75	0.51	459.06	1.77								
LTA chronic	2.87	1.03	0.01	4.19	2.90								
minimum of LTAs	2.87	1.03	0.01	4.19	1.77								
AMEL mult95	1.20	1.55	1.77	1.44	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
MEDEL mult99	1.65	3.11	4.10	2.62	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11
AMEL (aq life)	3.45	1.60	0.02	6.03	2.74								
MEDEL (aq life)	4.75	3.20	0.04	10.98	5.50								
MEDEL Multiplier	1.38	2.01	2.32	1.82	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01
AMEL (human hth)			0.050	610	700	1.8	0.00013	0.00059	0.00014	0.000000013	38.50	3.85	5.15
MEDEL (human hth)			0.115	1111	1404	3.61114	0.00026	0.00118	0.00028	0.000000026	77.24	7.32	10.33
minimum of AMEL for Aq. life vs HH	3.45	1.60	0.02	6.03	2.74	1.6	0.00013	0.00059	0.00014	0.000000013	38.50	3.85	5.15
minimum of MEDEL for Aq. life vs HH	4.75	3.20	0.04	10.98	5.50	3.6111	0.00026	0.0012	0.00028	0.000000026	77.24	7.32	10.33
Current limit in permit (30-d avg)	N/A	N/A	0.084	N/A	N/A	N/A	0.0013	N/A	N/A	0.000000013	N/A	N/A	N/A
Current limits in permit (daily)	78	23	24	71	25	N/A	N/A	N/A	0.019	N/A	N/A	N/A	N/A
Final limit - AMEL	3.45	1.60	0.019	6.0	2.74	1.80	0.00013	0.00059	0.00014	0.000000013	38.50	3.85	5.15
Final limit - MEDEL	4.75	3.20	0.044	11.0	5.50	3.91	0.00026	0.00118	0.00028	0.000000026	77.24	7.32	10.33
Max Effi Conc (MEC), 1999-2003	12.1	0.39	0.029	14.0	6	46.00	0.017	<0.01	<0.01	0.0000000466	17.0	2.9	1.1
Interim Limits for those where TMDL is final limit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A